

WESTON MAJOR PROGRAMS DIVISION
HEALTH AND SAFETY PLAN
EMERGENCY RESPONSE / SITE INVESTIGATION

TDD No. 9207-03

Site Name: Bayonne Barrel & Drum

Site Address: Street No. US Highway No. 1 & Raymond Blvd.

City Newark

County/State Essex County, NJ

Site Contact / Phone No.: _____

Directions to Site: (Att. Map) NJ Turnpike North to exit 15E to Rt 149
North, Exit onto Raymond Blvd (before Alaska
Stripway), bear to the right and make an immediate
right turn onto the Facilities parking lot.

Historical/Current Site Information:

The site is a former drum reconditioning facility. There
are over 40,000 drums, 3 aboveground storage tanks,
and various piles of ash material stored in a building.

Incident Type: ☐ Air Release - _____
☐ Spill - _____
☐ Fire - _____
☒ HW Site - _____

Location Class : ☒ Industrial ☐ Commercial ☐ Urban/Residential ☐ Rural

USEPA Contact: Nick Magriples Date of Initial Site Activities: 11/7/91

Original HASP: Yes _____ Modification Number: 2

Lead TAT: V. Vicenty Site Health & Safety Coordinator: N Magriples

Response Activities/Duration (fill in as applicable)

Emergency Response:

<input type="checkbox"/> Perimeter Recon.	_____
<input type="checkbox"/> Site Entry	_____
<input type="checkbox"/> Visual Documentation:	_____
<input type="checkbox"/> Multi-media Sampling:	_____
<input type="checkbox"/> Decontamination:	_____

Assessment:

<input checked="" type="checkbox"/> Perimeter Recon.	_____
<input checked="" type="checkbox"/> Site Entry	_____
<input checked="" type="checkbox"/> Visual Documentation:	_____
<input checked="" type="checkbox"/> Multi-media Sampling:	_____
<input type="checkbox"/> Decontamination:	_____



Physical Safety Hazards to Personnel

- ☒ Heat () Cold ☒ Precipitation () Confined Space () Terrain
- ☒ Walking/Working Surfaces () Fire & Explosion () Oxygen Deficiency
- () Underground Utilities () Overhead Utilities () Heavy Equipment
- ☒ Unknowns in Drums, Tanks, Containers () Ponds, Lagoons, Impoundments
- () Rivers, Streams () Pressurized Containers, Systems () Noise
- () Illumination () Nonionizing Radiation () Ionizing Radiation

Biological Hazards to Personnel None known

- () Infectious/Medical/Hospital Waste () Non-domesticated Animals () Insects
- () Poisonous Plants/Vegetation () Raw Sewage

Training Requirements

- ☒ 40 Hour General Site Worker Course with three days supervised experience.
- () 24 Hour Course for limited, specific tasks with one day supervised experience.
- () 24 Hour Course for Level D Site with one day supervised experience.
- ☒ 8 Hour Annual Refresher Health and Safety Training.
- () 8 Hour Management/Supervisor Training in addition to basic training course.
- () Site Specific Health and Safety Training.
- () Pre-entry training for emergency response skilled support personnel.

Medical Surveillance Requirements

- ☒ Baseline initial physical examination with physician certification.
- ☒ Annual medical examination with physician certification.
- ☒ Site Specific medical monitoring protocol (Radiation, Pesticide, PCB, Metals).
- () Asbestos Worker medical protocol.
- () Exempt from medical surveillance: _____.
- ☒ Examination required in event of chemical exposure or trauma.

SITE SAFETY PLAN AMENDMENT # 2:

SITE NAME: Bayonne Barrel

DATE: 7-13-92

TYPE OF AMENDMENT: Include Drum Sampling

REASON FOR AMENDMENT: Drums containing material were brought to the site by the PRP

ALTERNATE SAFEGUARD PROCEDURES:

REQUIRED CHANGES IN PPE: All sampling activities will require Level B PPE

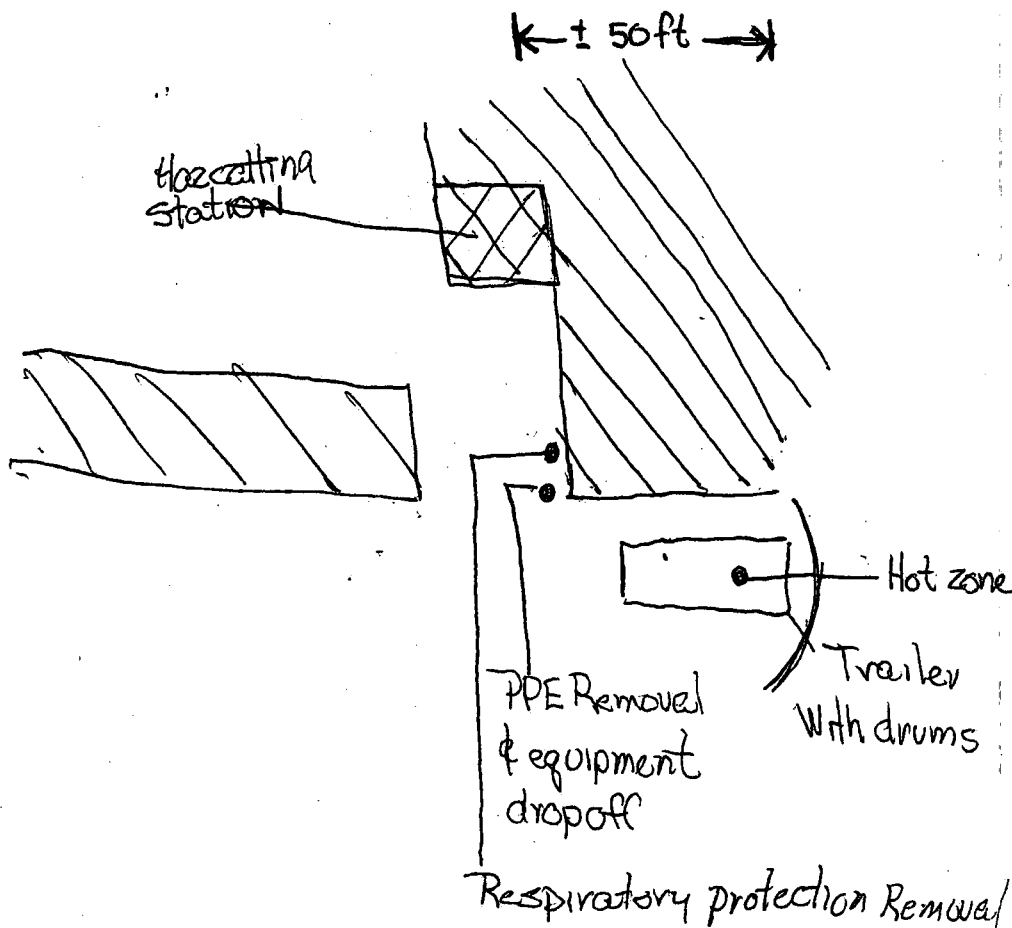
U.S. EPA HSO INFORMED:  7-13-92

ERCS CONTRACTOR HSO INFORMED:

TAT RSO INFORMED:

Physical Parameters	Chemical Contaminant	Chemical Contaminant	Chemical Contaminant	Chemical Contaminant
	UNKNOWN			
Exposure Limits IDLH Level	_____ ppm _____ mg/m ³ PEL _____ ppm _____ mg/m ³ TLV _____ ppm _____ mg/m ³ IDLH	_____ ppm _____ mg/m ³ PEL _____ ppm _____ mg/m ³ TLV _____ ppm _____ mg/m ³ IDLH	_____ ppm _____ mg/m ³ PEL _____ ppm _____ mg/m ³ TLV _____ ppm _____ mg/m ³ IDLH	_____ ppm _____ mg/m ³ PEL _____ ppm _____ mg/m ³ TLV _____ ppm _____ mg/m ³ IDLH
Physical Form Sol. Liq. Gas Color	_____ Solid _____ Liquid _____ Gas _____ Color	_____ Solid _____ Liquid _____ Gas _____ Color	_____ Solid _____ Liquid _____ Gas _____ Color	_____ Solid _____ Liquid _____ Gas _____ Color
Odor				
Flash Point Flammable Limits	_____ Degrees F or C _____ % UEL _____ % LEL	_____ Degrees F or C _____ % UEL _____ % LEL	_____ Degrees F or C _____ % UEL _____ % LEL	_____ Degrees F or C _____ % UEL _____ % LEL
Vapor Press. Vapor Dens.	_____ mm/Hg _____ Air = 1	_____ mm/Hg _____ Air = 1	_____ mm/Hg _____ Air = 1	_____ mm/Hg _____ Air = 1
Specific Gravity	_____ Water = 1	_____ Water = 1	_____ Water = 1	_____ Water = 1
Solubility				
Incompatible Materials				
Route of Exposure	_____ Inh _____ Abs _____ Con _____ Ing	_____ Inh _____ Abs _____ Con _____ Ing	_____ Inh _____ Abs _____ Con _____ Ing	_____ Inh _____ Abs _____ Con _____ Ing
Symptoms of Acute Exposure				
First Aid Treatment				
Ion Potential	_____ eV	_____ eV	_____ eV	_____ eV
Instruments For Detection	_____ PID w/ _____ Probe _____ FID _____ CGI _____ RAD _____ Det Tube _____ Ph Other _____	_____ PID w/ _____ Probe _____ FID _____ CGI _____ RAD _____ Det Tube _____ Ph Other _____	_____ PID w/ _____ Probe _____ FID _____ CGI _____ RAD _____ Det Tube _____ Ph Other _____	_____ PID w/ _____ Probe _____ FID _____ CGI _____ RAD _____ Det Tube _____ Ph Other _____

Site Map with work zones:



Decontamination Procedures

- () Wet Decontamination - using: _____
 (X) Dry Decontamination

Description of Site Specific Decontamination

Plan: Upon exiting the exclusion zone, all equipment will be properly decontaminated. The OSC or designated alternate will inspect and ensure proper decontamination. Expendables will be bagged and left on site.

Adequacy of decontamination determined by: _____

TASK TO BE PERFORMED/AIR MONITORING REQUIRED	ANTICIPATED LEVEL OF PROTECTION	TYPE OF CHEMICAL PROTECTIVE COVERALL	INNER GLOVE OUTER GLOVE BOOT COVER	TYPE OF APR CARTRIDGE OR CANISTER
Entry into trailer constant air monitoring	B	Saran	inner- Nitrile outer - Solvex	N/A
Sampling of drums constant air mon	B	Same as Above		
Perimeter Recon. constant	C	Tyvek	inner- Nitrile outer - solvex	MSA GMC-H

Frequency and Types of Air Monitoring: ☒ Continuous () Routine - _____ () Periodic - _____

DIRECT READING INSTRUMENTS	COMBUSTIBLE GAS/OXYGEN METER (1)	RADIATION SURVEY METER/PROBE (2)	PHOTOIONIZATION DETECTOR/PROBE (3)	FLAME IONIZATION DETECTOR (4)	CHEM. DETECTOR TUBE (5)
ID NUMBER		190187	G	D	HCl, HCN
CAL. DATE		7-14-92 7-14-92 ⁽¹⁾	7-14-92	7-14-92	
TAT MEMBER			V Vicenty	PC Polvin	
ACTION LEVEL	≥ 20%LEL ≤ 19.5%, ≥ 23% O ₂ - LEAVE	3X BACKGRND - CAUTION; 1 MR/HR-LEAVE	UNKNOWN 0-5 UNITS:"C" 5-500:"B"	UNKNOWN 0-5 UNITS:"C" 5-500:"B"	PEL/TLV COMPARE W/PF

Size of Site: _____ Terrain _____ Weather _____
 Distance to Nearest: Residence _____ School _____ Hospital _____
 Public Building _____ Other _____
 Evacuation: () Yes () No By Whom: _____
 Nearest Waterway: _____ Distance from Site: _____

Condition	Observed	Potential	None	Comments/Observations
Surface Water Contamination		X		
Ground Water Contamination		X		
Drinking Water Contamination		X	X	
Air Release		X		
Soil Contamination	X			
Stressed Vegetation				
Dead Animal Species				

Actions Taken On-Site:

Perimeter Monitoring: () Yes () No
 Site Entry by TAT: () Yes () No

Tasks Conducted	Level of Protection/Specific PPE Used
Air Monitoring, Initial Entry	B - Saranex
Drum Inventory	B - Saranex
Drum Sampling	B - Saranex

Air Monitoring Summary Log

Date: 11/13/91

Data Collected by: V. Veeny

Data to be summarized by a "Range of readings, i.e., - Low to High" and/or "Average" by location.

Station/Location	CGI/O ₂ Meter	Radiation Meter	PID/Probe	FID/OVA	Detector Tube
Tank 1 Perimeter	0	0	0	0	
Tank 2 Perimeter	0	0	0	0	
Tank 3 Perimeter	0	0	0	0	
Drum yard	0	0	0	0	
Separator Trench ± 1/2" above water level	0	0	0	1-2 ppm	

Summary/Comments: All monitoring was performed in Level C since the area is open space

Date: ___/___/___

Data Collected by: _____

Data to be summarized by a "Range of readings, i.e., - Low to High" and/or "Average" by location.

Station/Location	CGI/O ₂ Meter	Radiation Meter	PID/Probe	FID/OVA	Detector Tube HCl HCh
Initial entry		Background	Background	Background	0
Constant during Inventory & Sampling		Background	Background		

Summary/Comments: _____

Hazardous Waste Site and Environmental Sampling Activities

Off Site: () Yes (X) No
On Site: (X) Yes () No

Describe types of samples and methods used to obtain samples: Solid Low conc. for Dioxine & Furans, Obtained by augering with stainless steel auger

Was Laboratory notified of Potential Hazard Level Of Samples? ☒ Yes () No

Note: The nature of the work assignment may require the use of the following procedures/programs which will be included as Attachments to this HASP as applicable: Emergency Response Plan, Confined Space Entry Procedures, Spill Containment Program.

Disclaimer: This Health and Safety Plan (HASP) was prepared for work to be conducted under the Technical Assistance Team (TAT) Contract 68-WO-0036 for Zone I. Use of this HASP by WESTON and its subcontractors is intended to fulfill the OSHA requirements found in 29 CFR 1910.120. Items not specifically covered in this HASP are included by reference to 29 CFR 1910 and 1926.

The signatures below indicate that the individuals have read and understood this Health and Safety Plan.

PRINTED NAME	SIGNATURE	AFFILIATION	DATE
PETER DI PASCA, JR.	<i>Peter DiPasca Jr.</i>	WESTON TAT	11-13-91
Victor Vicenty	<i>Victor Vicenty</i>	WESTON TAT	"
Nick Magrinos	<i>Nick Magrinos</i>	FPA	"
<i>R. J. Montoya</i>	<i>Robert J. Montoya</i>	FPA	11

Final Submission of HASP by:	<i>Victor Vicenty</i>	Date
Post Response Review by:		
Post Response Approval by:		
TAT HSO Review by:		

COMMENTS/FOLLOWUP

Off Site:

☒ Yes☒ No

On Site:

☒ Yes☐ No

Describe types of samples and methods used to obtain

samples: Samples were collected with Drum thievesWas Laboratory notified of Potential Hazard Level Of Samples? ☒ Yes () No

Note: The nature of the work assignment may require the use of the following procedures/programs which will be included as Attachments to this HASP as applicable: Emergency Response Plan, Confined Space Entry Procedures, Spill Containment Program.

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Final Submission of HASP by:		Date
Post Response Review by:		
Post Response Approval by:		
TAT HSO Review by:		

COMMENTS/FOLLOWUP

DRUM SAMPLING STANDARD OPERATING PROCEDURES

Introduction

Many hazardous waste disposal sites and industrial facilities have containers on-site that may have to be sampled as part of investigations initiated under RCRA and CERCLA programs. These containers, specifically drums, may have a wide range of contents, including all types of inorganic and organic chemicals with a variety of physical and chemical characteristics. Since the opening and sampling of these drums could release toxic vapors or cause a violent reaction, such operations should be handled with the utmost safety precautions.

Preliminary Assessment

Once a decision to sample has been made, the site should be evaluated and the following information obtained:

1. Categorization of drums

The entire number of drums should be assessed and categorized into those containing the same or similar chemicals as well as unknown contents. Each of these categories should be considered as a separate group for sampling purposes.

2. The number, type and condition of drums

Prior to any sampling, the number of drums to be sampled should be determined. Depending on the needs of the program, these drums can be selected by accessibility or randomly. When selecting drums, it is important to select only top bung drums that are in good condition. Deteriorated drums (i.e., rusted, corroded, bulging, etc.) should not be opened or moved as the risk of a rupture or spill is greatly enhanced when dealing with these types of containers.

3. The suitability of the site for a safe and efficient operation

Care should be taken to insure the safety of the surrounding populace by checking proximity of the site to local residences, highways, railroads or other facilities. A contingency plan should be prepared and discussed with all pertinent personnel prior to initiating the operation. The plan should address mitigatory actions in the event of a spill, leak or explosion.

4. Hazards associated with the site

A thorough attempt should be made to ascertain the nature of

the material in the drums to be sampled or moved. This can be done in a number of different ways including, review of past analyses, site history, employee and former employee interviews, etc. Any information related to the site should be considered in developing the contingency plan.

Pre-sampling Preparation

A sampling team should be formed based on information gathered in the preliminary assessment and the needs of the program. The sampling team should consist of at least three members, a team leader and two samplers. When possible, a designated safety officer should be included as an additional team member to assist in the development of the sampling and safety plans.

Drum Opening

The selection of a safe drum opening technique should be based on the information available on the contents of the drum. For drums that contain a known substance, the opening procedure may not be as complex as that for drums containing an unknown substance.

1. Containers with known contents

At least two persons should be used to sample drums. The samplers should be equipped with the proper safety equipment to deal with the material in the drum. If there is any doubt as to the nature of the drummed material, the drum should be handled as if the contents are unknown.

Drums with known contents that are not reactive or extremely volatile can be opened by hand with a non-sparking bung wrench. Drums that contain a reactive or volatile compound should be opened with a remote opener.

2. Containers with unknown contents

When opening a drums with unknown contents, it is highly recommended that the drum be opened in an area away from the main drum storage area. Methods for container movement are covered in Technical Methods for Investigation of Sites Containing Hazardous Substances, Technical Monograph No. 20, section 20.4.1.

Samplers that plan to open drums of unknown material should use a remote bung opening device. The personal protective gear for this operation should be at a minimum level B (SCBA and chemical protection suit). EPA's National Enforcement Investigation Center (NEIC) has developed two remote control drum opening devices, a side penetrating device and a bung remover. For other than emergency response operations, the penetrating device is inappropriate and therefore is not

discussed in this SOP.

The bung remover is designed to be used on vertical top bung drums only. The opener should only be used on drums of known integrity, i.e., not rusted or corroded. It is also recommended that the smaller diameter bung be opened first, if possible, as this operation requires less torque.

To set up the apparatus, the drum bracket should be aligned with the wrench bracket directly over the bung to be opened, and fastened securely to the drum. The non-sparking bung socket should then be placed on the bung and the impact wrench fastened into the drum bracket. The sampler should now attach the low pressure air hose to the drill and then return to the low pressure tank. The opening operation requires a short (2-5 second) burst of air from the tank. (The distance from the drum to the low pressure tank is variable depending on length of hose or the predesignated safety area). If the bung has not been loosened, the sampler should return to the drum to recheck the setup.

Some common causes of problems are:

- 1) The drill is loose in its bracket.
- 2) The drill direction is reversed.
- 3) The drum bracket is not aligned properly.

If the set-up seems satisfactory, the drill should set up to remove the larger bung and the operation repeated. If the drum does not open after repeated attempts, another drum should be selected.

Sampling

The sampling method to be used is determined by the physical state of the drummed material (solid, liquid, sludge, etc.). It is important to coordinate the sampling effort with the laboratory. The lab will be able to indicate the amount of sample needed to perform the desired analysis.

1. Liquid Waste

To sample waste, a 4-foot length of glass tube should be used. The inside diameter of the tube will be dependent on the viscosity of the material (for most liquids, 6 to 8 mm I.D. tube should be adequate). To sample, one person should insert the tube into the drum. By sealing the top of the tube with a stopper or thumb, the sampler can extract a sample from the drum. The other sampler should be holding the sample container and assist in transferring the material to the container. After collecting the sample, the glass tube is broken and placed in the drum.

Note: Sampling personnel should observe if multi-phase liquid layers are in the glass tube. Samples of

each phase may be obtained using the same method. This will require separate sample containers for each phase if drum waste characterization is being performed.

2. Sludge Waste

For sludges, a larger bore glass tube may be needed. This may require removing the larger bung. A 40 ml glass vial fastened to a wooden dowel can be used in lieu of a large bore glass tube. The glass tube or vial and dowel should be disposed of properly, e.g., placed in the drum that was sampled, buried on-site, etc.

Note: If the small bung has already been removed, the large bung can be removed with a bung wrench.

3. Solid Waste

Occasionally, a drum containing a solid or granular waste may have to be sampled. These types of drums, often constructed of fiberboard, are easily sampled with a disposable scoop if the drum is an open-top. If the drum is closed, a brass or wood spoon attached to a wooden dowel may be used. To obtain core samples, two tools are recommended: a grain sampler or a sampling trier.

The grain sampler consists of two slotted telescoping tubes, usually made of brass or stainless steel. The outer tube has a conical, pointed tip on one end that permits the sampler to penetrate the material being sampled.

To sample:

1. Insert the sampler in the closed position into the material to be sampled.
2. Rotate the inner tube to open the sampler and wiggle the tube to allow materials to enter the device.
3. Remove the sampler from the material and transfer contents to appropriate sample container.

A typical sampling trier is a long tube with a slot that extends almost its entire length. The tip and edges are sharpened to allow easier penetration into the material to be sampled. The use of the trier is similar to that of the grain sampler discussed above. However, the trier is preferred when sampling moist media.

To sample:

1. Insert the trier into the waste material at a slight

angle and rotate the trier once or twice to cut a core of material.

2. Slowly withdraw the trier, making certain that the slotted portion is facing upward.
3. Transfer the sample to an appropriate container using a brush or spatula.

Only about 20 to 30 grams of this type of material are required for analysis.

Since both of these samplers are reusable, they should be decontaminated (pre-cleaned) in the field using cleanser and water and brought to the lab for solvent washing.

Note: Some of these solid materials may be reactive when exposed to the atmosphere. The sampler should note any changes in the physical characteristics (i.e. heat build-up, color change) of the sample and retreat to a safe area to discuss mitigatory procedures. It is recommended that non-sparking tools be used when sampling granular or solid media.

Drum Closing

After completion of the sampling activities, the drum should be resealed using a bung wrench.

HAZCAT CHEMICAL IDENTIFICATION SYSTEM

WEAR EYE PROTECTION AND GLOVES WHEN PERFORMING TESTS

SAFETY

USE AND CARE INSTRUCTIONS:

The HazCat Chemical Identification System's SAFETY depends upon three basic premises:

1. Very small quantities of the unknown are used.
2. Suggested protective clothing should prevent contact with these small amounts of the unknown, even if the clothing is not the optimum material to prevent break through.
3. Very reactive chemicals provide sufficient warning prior to collection.

MAINTAIN YOUR WORK AREA AND EQUIPMENT:

Develop good work habits; work in a ventilated environment; wear safety equipment; maintain the equipment; clean-up spills immediately; and keep work area clean, organized and uncluttered.

TEST TUBES:

Borosilicate test tubes must be used while performing HazCat tests. The amounts of reagent given in the directions for HazCat are specific for 13 x 100 mm borosilicate test tubes.

Occasionally a batch of these test tubes is defective. This can be seen as an unusual amount of breakage, especially during the Char Test. Haztech Systems Inc. recommends the immediate replacement of the entire batch. If the tubes were purchased from Haztech, we will replace them immediately at no cost.

TESTS ARE QUALITATIVE ONLY:

HazCat is qualitative field chemistry. Usually the amounts of reagents used during the tests are purposely small and approximate. If something does not seem right, more or less reagent may be added. When HazCat instructions are specific "add one drop" or "add one drop at a time", FOLLOW THESE DIRECTIONS CAREFULLY.

HAZCAT CHEMICAL IDENTIFICATION SYSTEM

SAFETY

ALWAYS

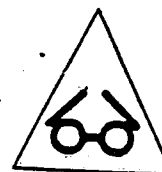
Wear Protective Clothing when collecting samples and performing tests!



Caution
Wear
Gas Mask



Caution
Wear
Gloves



Caution
Wear
Goggles

You may not require a respirator in every case, but always wear gloves and goggles.

ALWAYS

Watch Tests!!!! Looking away can be very dangerous. Do not assume that nothing more is going to happen once you have finished the test. Some delayed reactions can be very violent or, at least, spectacular.

ALWAYS

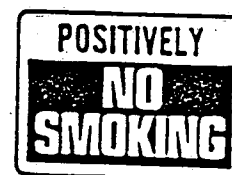
Consider that a material may have more than one hazard categorization. If material is still unknown at the end of the test procedure, make sure that you have done a pH test, ignition test, oxidizer test and a peroxide test.

ALWAYS

Keep track of the people who may have been exposed until you have a hazard classification.

ALWAYS

Wash off any contaminated skin or clothing immediately. Keep your work station clean. Keep track of your spent test tubes. Do not empty them until you know what the material is.



ALWAYS

Remember that this system identifies most commonly spilled materials, but not all materials—treat as dangerous!!!!

SAFETY

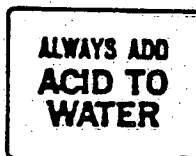
DO NOT

point test tube at anyone!



DO NOT

add water to the unknown!

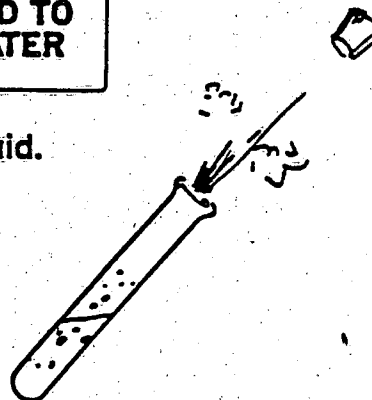


DO NOT

put **HOT** chlorine hot wire into liquid.

DO NOT

put cork in test tube containing effervescing material!



DO NOT

heat the unknown material directly in the char test. Preheat the tube above the material, and slowly work the flame into the region of the test tube containing the unknown.

DO NOT

breathe or smell the fumes coming off the char test.

DO NOT

hold the test tube in your bare hands.

If no visible reaction is taking place, you may feel the test tube carefully to determine whether the reaction is exothermic or endothermic.



DO NOT

sniff an unknown material. Often the odor will waft toward you. If the material is not fuming, you may fan a small amount of the head space material in your direction with your hand. Do this after you have completed the tests and have a sense of the category of material you are dealing with.

DO NOT

use the same test tube for more than one test. Use a new test tube for each test so that there is definitely no contamination from the previous test. You may do the pH test using the water solubility test done just previously.

DO NOT

allow flame near open container of the unknown. Keep container of unknown material away from water, reagents and other unknowns.